

*acuminato-oblonga, intus rubra, strigata, nitida; perist. simplex, rectum, margine columellari sursum sensim dilatato, subappresso.*

Long. 36, diam. 14 mill.

*Hab.* Province of Patas, Andes of Peru (Dr. Farris).

9. *BULIMUS FARRISI*, Pfr. (fig. 8). *T. anguste umbilicata, fusiformi-turrita, solidula, longitudinaliter subremote pliculata et conferte striolata, striis spiralibus levibus decussatula, albida vel rosea, plerumque strigis et maculis pellucidibus fuscis vel rubris signata; spira elongato-conica, apice acutiuscula, crocea; anfr.  $6\frac{1}{2}$ —7 planiusculi, ultimus spiram subæquans, vix ventrosior, basi attenuatus; columella superne levissime plicata; apertura parva obliqua, acuminata, oblongo-ovalis, intus fusco-crocea; perist. simplex, rectum, margine columellari superne dilatato, fornicatim reflexo.*

Long. 47, diam. 16 mill.

*Hab.* Province of Patas, Andes of Peru (Dr. Farris).

10. *BULIMUS CLATHRATUS*, Pfr. *T. compresse umbilicata, fusiformi-oblonga, tenuiuscula, plicatula, parum nitens, albida, strigis et fasciis angustis interruptis fuscis subclathrata; spira elongata, apice acutiuscula; anfr. 8 parum convexi, ultimus  $\frac{2}{3}$  longitudinis vix superans, basi compressus; apertura vix obliqua, subrhombeo-ovalis; columella medio leviter torta; perist. simplex, rectum, margine columellari a basi dilatato, superne late patente.*

Long. 30, diam. 11 mill.

*Hab.* Province of Patas, Andes of Peru (Dr. Farris).

## 5. ADDITIONAL OBSERVATIONS ON THE GENUS *FURCELLA*.

BY DR. J. E. GRAY, F.R.S., ETC.

Sir Everard Home figured, as I stated in my former paper, the fragment of the vaulted continuation of the tube that closes its lower ends, for the shelly valves of the animal. Considering this as an accidental mistake, I took no further notice of it. An eminent comparative anatomist having observed,—“In the great *Teredo arenaria*, which lives in soft mud, the valves are wanting, according to Dr. Gray, or their homologues form the convex cap closing the periodical growths of the calcareous tubes” (“Mollusca,” in *Ency. Britan.* 353), I feel it incumbent on me to show the reasons why I cannot consider the “convex caps” closing the calcareous tube to be the homologues of the true valves, which, in my paper, I have said are entirely absent.

First. The caps have the structure, and are continuations of the tube, and have no relation to the usual valves of the *Teredo* in their form or structure.

Secondly. The convex caps here referred to are evidently identical in structure and formation with the convex cap that is found on the end

of the tubes of the allied genera *Clavagella* and *Aspergillum*; and as these genera have the shelly valves of the animal in their proper situations, on the sides of the body, quite distinct from the convex caps, I think it is conclusive that they are not the *homologue* of the valves, in those genera, as both the valves and the caps which are considered as their homologue are present together, so that I must consider the convex cap in those genera as I do in *Furcella*, as only a continuation of the shelly tube in which the animal lives, and having no more affinity with the shelly valves than the tube of *Gastrochæna* and some *Lithodomi* and other perforating Mollusca.

Thirdly. It is to be remembered that some species of the true genus *Teredo*, which have distinct shelly valves, also form a shelly convex cap at the base of their tube in front of the animal, exactly similar in structure and situation to the cap of the genus *Furcella*, as I mentioned in my former paper; so that I cannot consider it only as a septum formed by the animal for its protection during the period of rest in those species of *Teredinidæ* which have true, well-developed, shelly valves, and the same convex caps as the homologue of the shelly valve in the genus of the family which are without true valves.

Hence I must continue to regard *Furcella* as a Conchifer without shelly valves or any part homologous to them; and if we were to find a Conchifer without valves, I should consider their absence would be most likely to occur in a family which have the valves in the normal members of it so reduced in comparison with the size of the animal as in *Teredinidæ*, where they have been regarded as "mere appendages of the foot;" and also being a family of Bivalve Mollusca, in which the animals always live in a shelly tube, it is one in which the valves are least required for their protection.

Since I sent in the former paper, I have had the opportunity of examining Mr. Cuming's series of *Furcella* from the Island of Camiguen, one of the Philippines, where they live in hard mud left exposed at very low water.

Mr. Cuming has several specimens of the tube of the young animal, which commence with a much smaller diameter than the specimen figured, and enlarge more rapidly in thickness, so that the tube is more conical. He has two examples of the base of the tube of larger specimens, which end in the cap formed of two overlapping arched plates, like the one figured, showing that to be the normal formation of the termination. All the specimens have two separate apical siphonal tubes.

He has also two specimens of the upper part of the tube, which are of a slender, elongated, nearly cylindrical form; both are pierced the whole length with two central semicylindrical tubes, separated by a narrow opaque septum. One of these specimens is water-worn, the other as fresh as if it had been broken from a living specimen; the latter shows at the fracture that the apex of the tube is formed of a number of concentric laminæ deposited one within the other. The two semicylindrical siphon tubes are surrounded with a special

opaque shelly lamina, the septum between them being of the same thickness and structure; and between the outer surface of this tube of the siphon and the inner surface of the cylindrical outer sheath or tube, there is deposited at each end of the central septum, between the two siphonal tubes, a transverse space filled with a loose, spongy, cellular shelly texture.

Mr. Cuming has two small tubes from California which appear to belong to the genus *Teredo*, which have the lower or larger end of the tube closed with a single hemispherical cap like those described in my former paper. In one the cap is simple and terminal, and the apex of the tube is oblong and quite simple; in the other the cap at the lower end of the tube is larger, rather distorted, and bent on one side of the axis of the tube, and the aperture at the apex of the tube is partially divided by a series of plates, which have a prominence in the middle on each side, forming an imperfect division of the cavity.

I may add, that the siphonal end of the tube being divided into two distinct tubes is not a distinctive character of *Furcella*, as we have in the British Museum a *Teredo* or rather a *Xylotrya* from Sierra Leone which has some of its tubes furnished with two distinct siphonal apertures, and others in which the tubes are only partially separated, and others with a simple aperture.

The Cloisonnaire de la Méditerranée of M. Matheron (Annales des Sciences et de l'Industrie du Midi de la France, vols. 1 & 2), quoted by Deshayes (Ann. Sci. Nat. xi. 245), is evidently a *Teredo*, furnished with shelly valves and palettes, and not a *Furcella*.

6. ON A NEW GENUS AND SEVERAL NEW SPECIES OF UROPELTIDÆ, IN THE COLLECTION OF THE BRITISH MUSEUM. BY DR. J. E. GRAY, F.R.S., V.P.Z.S., F.L.S., PRES. ENT. SOC., ETC.

These animals, when first discovered, were arranged with *Typhlops* by Schneider; and afterwards Cuvier, who had previously regarded them as belonging to that genus, formed for some of them a genus under the name of *Uropeltis*. In the 'Catalogue of the Specimens of Lizards in the Collection of the British Museum' (12mo. 1845), I formed for them a family under the name of *Uropeltidæ*, and divided the species into three genera, each containing a single species. Lately I described a fourth genus named *Morina* in the 'Proceedings' of this Society (1858).

Professor Johann Müller, in an article on the 'Osteology of Reptiles' in Tiedemann's 'Zeitschrift für Physiologie' for 1831 (vol. iv.), gave an account of the osteology of the two genera *Rhinophis* and *Uropeltis*. Schlegel in 1837 regarded them as a genus under the name of *Pseudotyphlops*, and noticed three species.

Having occasion to re-examine the various specimens which we have received since the printing of the Catalogue above referred to, I have found several additional species.